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| APPLICATION NO.                | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|--------------------------------|-----------------|----------------------|---------------------|------------------|--|
| 10/715,602                     | 11/17/2003      | William P. Addiego   | SP03-156            | 4882             |  |
| 22928                          | 7590 04/18/2006 |                      | EXAM                | EXAMINER         |  |
| CORNING INCORPORATED SP-TI-3-1 |                 |                      | NGUYEN, CAM N       |                  |  |
| CORNING, N                     | VY 14831        |                      | ART UNIT            | PAPER NUMBER     |  |
|                                |                 |                      | 1754                |                  |  |

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |  |  |  | 1  |  |  |
|--|--|--|--|----|--|--|
|  |  | Application No.  | Applicant(s)   |    |  |  |
|  |  | 10/715,602   | ADDIEGO ET AL.   |    |  |  |
|  | Office Action Summary  | Examiner   | Art Unit   |    |  |  |
|  |  | Cam N. Nguyen  | 1754   |    |  |  |
| Period fo  | <ul> <li>The MAILING DATE of this communication apport Reply</li> </ul>  | pears on the cover sheet with  | the correspondence address   |    |  |  |
| WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS OF THE MAILING THE MAIL | ATE OF THIS COMMUNIC 36(a). In no event, however, may a reposite apply and will expire SIX (6) MONT 4, cause the application to become ABA | ATION.  Oly be timely filed  HS from the mailing date of this communic NDONED (35 U.S.C. § 133). | ·  |  |  |
| Status   |  |  |  |    |  |  |
| 1) 又   | Responsive to communication(s) filed on 02/03  | 2/06 (an amendment/respo   | nse).  |    |  |  |
|  |  | action is non-final.   | <u></u> -  |    |  |  |
| 3)□  | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is  |  |  |    |  |  |
|  | closed in accordance with the practice under E   | Ex parte Quayle, 1935 C.D.   | 11, 453 O.G. 213.  |    |  |  |
| Disposit   | ion of Claims  |  |  |    |  |  |
| 4)⊠  | Claim(s) 1-10 is/are pending in the application  |  |  |    |  |  |
| -  | 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |  |    |  |  |
| 5)□  | Claim(s) is/are allowed.   |  |  |    |  |  |
| 6)⊠  | Claim(s) <u>1-10</u> is/are rejected.  |  |  |    |  |  |
| ·  | Claim(s) is/are objected to.   |  |  |    |  |  |
| 8)[]   | Claim(s) are subject to restriction and/o  | r election requirement.  |  |    |  |  |
| Applicati  | ion Papers   |  |  |    |  |  |
| 9)[  | The specification is objected to by the Examine  | ır.  |  |    |  |  |
| 10)  | The drawing(s) filed on is/are: a) acc   | epted or b)□ objected to b   | y the Examiner.  |    |  |  |
|  | Applicant may not request that any objection to the  | drawing(s) be held in abeyand  | e. See 37 CFR 1.85(a).   |    |  |  |
|  | Replacement drawing sheet(s) including the correct   |  |  |    |  |  |
| 11)  | The oath or declaration is objected to by the Ex   | caminer. Note the attached   | Office Action or form PTO-15   | 2. |  |  |
| Priority ι   | under 35 U.S.C. § 119  |  |  |    |  |  |
|  | Acknowledgment is made of a claim for foreign  ☐ All b)☐ Some * c)☐ None of:   | priority under 35 U.S.C. §   | 119(a)-(d) or (f).   |    |  |  |
| - 71   | 1. Certified copies of the priority document   | s have been received.  |  |    |  |  |
|  | 2. Certified copies of the priority document   |  | plication No   |    |  |  |
|  | 3. Copies of the certified copies of the prior   | •  |  | €  |  |  |
|  | application from the International Bureau  | ı (PCT Rule 17.2(a)).  |  |    |  |  |
| * 8  | See the attached detailed Office action for a list   | of the certified copies not re   | eceived.   |    |  |  |
|  |  |  | •  |    |  |  |
| Attachmen  | t(s)   |  |  |    |  |  |
|  | ee of References Cited (PTO-892)   | 4) Interview Su  | mmary (PTO-413)  |    |  |  |
|  | e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08)   |  | /Mail Date ormal Patent Application (PTO-152)  |    |  |  |
|  | r No(s)/Mail Date  | 6) 🔲 Other:  |  |    |  |  |

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#### **DETAILED ACTION**

## Response to Amendment

1. Applicants' amendment and remarks, filed February 02, 2006, has been made of record and entered. Claims 1-2, 5, 7, & 9-10 have been amended.

Claims 1-10 are currently pending and under consideration.

### Claim Objections

2. Claim 1 is objected to because of the following informalities: in line 2 of step (d), "with" is suggested changed to --having--. Appropriate correction is required.

# Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1, 9, & 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chalasani et al., "hereinafter Chalasani", (US Pat. 6,080,345).

Chalasani discloses a method for forming and shaping plasticized powder mixtures, the method comprising: a) a compounding components comprising: I) powder materials; ii) binder (cellulose ether); iii) aqueous-based solvent (water); iv) surfactant (acid); and v) non-solvent (mineral oils, fatty acids, etc.); b) mixing and platicizing said

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components to form a plasticized mixture; and c) shaping the plasticized mixture to form a green body (see col. 19, claims 1-15). The mixture comprises about 0.2% to 10% of surfactant (acid) (see col. 20, claim 16). See also col. 21, claim 26- col. 22, claim 27. Suitable powder materials including a mixture of alumina and silica powder (see col. 3, ln 65- col. 4, ln 14). The green body can be dried and fired at a temperature and time (see col. 12, ln 30-57).

Chalasani is silent with respect to the concentrations of the alumina and silica, and the surface area of the green body.

It would have been *prima facie obvious* to one of ordinary skill in the art at the the time the invention was made to have predetermined the optimum amounts of alumina and silica in such process in order to achieve an effective support material because the metal concentration is a result effective variable, in view of *In re Boesch*. It is considered that the surface area of the support material is dependent on the metal concentrations, and thus would have been obviously obtained upon optimizing such metal concentrations.

5. Claims 2-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chalasani et al., "hereinafter Chalasani", (US Pat. 6,080,345), as applied to claims 1, 9, & 10 above, and further in view of Jaffe (US Pat. 4,289,653).

Chalasani discloses a method for forming and shaping plasticized powder mixtures as described above, except for the process of preparing the alumina-silica powder.

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It would have been *prima facie obvious* to one of ordinary skill in the art at the time the invention was made to have utilized the alumina-silica powder made by the process of Jaffe in order to achieve an improved support material.

Jaffe discloses an extruded silica-alumina catalyst, which prepared by a method which consists essentially of the following steps: mixing a sodium silicate solution with an aqueous aluminum sulfate solution and sulfuric acid to form an acidified silica sol in an alumina salt solution having a pH in the range of about 1 to 3; adding sufficient ammonium hydroxide to said acidified silica sol in the aluminum salt solution to form a cogelled mass of silica and alumina under substantially constant pH conditions and at a pH of at least 4; adding additional ammonium hydroxide to the cogelled mass to obtain a pH in the range of 7.5 to 8.5; washing the cogelled mass; mulling the cogelled mass with a peptizing agent, a Group VI-B metal compound and a Group VIII metal compound to form an extrudable dough; extruding said dough; and drying and calcining the extruded dough (see col. 6, claim 1). The peptizing agent is acetic acid (see col. 6, claim 3). The method further comprising spray-drying the washed cogelled mass prior to the mulling step (see col. 6, claim 4). The extrudates are dried at a temperature of up to 200°C for a period of several hours, and calcined in an oxidizing atmosphere, such as air, at a temperature of from about 315°C to about 650°C over a period of from about 0.5 to about 6 hours (see col. 4, ln 34-41). Jaffe further discloses catalysts A-F which were prepared by using the weight ratio of alumina to silica in the amount of 75/25 to 70/30 (see Table I in Examples).

# Response to Applicants' Arguments

6. Applicants' amendment and remarks filed on February 02, 2006 has been considered, but not deemed persuasive in view of the new ground of rejection above.

#### **Citations**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form prepared attached.

## Conclusion

- 8. Claims 1-10 are pending. Claims 1-10 are rejected. No claims are allowed.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M, W, R, & F, 9:00 AM 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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